

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A system for distributing a packet received over a network, the system comprising:

(a) a plurality of servers connected to the network; and

(b) a load balancer, connected to the network, for selecting one of the plurality of servers according to a calculation, wherein said calculation is performed according to the formula:

((SRC_IP_ADDR + DEST_IP_ADDR + DEST_PORT) % N)

wherein SRC_IP_ADDR is the source IP address of the packet; DEST_IP_ADDR is the destination IP address of the packet; DEST_PORT is the port of the destination of the packet; % is a modulo operation; and N is the number of servers.

2. (original): The system of claim 1, wherein said calculation is determined such that each packet from a particular session is sent to the same server.

3. (original): The system of claim 1, wherein said calculation is independent of any feedback from the plurality of servers.

4. (original): The system of claim 3, wherein said load balancer does not receive feedback from said plurality of servers.

5. (original): The system of claim 2, wherein said load balancer does not maintain a session table.

6. (original): The system of claim 1, wherein said calculation is based on data associated with the packet.

7. (original): The system of claim 6, wherein said data is invariant from packet to packet within a session.

8. (original): The system of claim 6, wherein at least a portion of the data is associated with a source of the packet.

9. (original): The system of claim 6, wherein at least a portion of the data is associated with a destination of the packet.

10. (original): The system of claim 6, wherein at least a portion of the data is associated with a destination port of the packet.

11. (original): The system of claim 6, wherein at least a portion of the data is associated with a source port of the packet.

12. (original): The system of claim 6, wherein at least a portion of the data is associated with a protocol number of the packet.

13. (canceled).

14. (original): The system of claim 1, wherein said plurality of servers are redundant servers.

15. (currently amended): The system of claim 13, wherein said load balancer is termed a first load balancer, and further comprising a second load balancer, connected to the network,

for selecting, according to the formula, one of the plurality of servers for receiving another packet received over the network.

16. (original): The system according to claim 15, wherein said second load balancer is operable only if said first load balancer is inoperable.

17. (currently amended): ~~The~~A system of claim 1 for distributing a packet received over a network, the system comprising:

- (a) a plurality of servers connected to the network; and
- (b) a load balancer, connected to the network, for selecting one of the plurality of servers according to a calculation, wherein said calculation is performed according to the formula:

$((\text{SRC_IP_ADDR} + \text{SRC_PORT} + \text{DEST_IP_ADDR} + \text{DEST_PORT} + \text{PROTOCOL}) \% N)$

wherein SRC_IP_ADDR is the source IP address of the packet; SRC PORT is the source port number of the packet, DEST_IP_ADDR is the destination IP address of the packet; DEST_PORT is the port of the destination of the packet; PROTOCOL is the protocol number of the packet, % is a modulo operation; and N is the number of servers.

18. (currently amended): A method for load balancing a plurality of servers, comprising:
- (a) receiving a packet;
 - (b) determining a source IP address of said packet, a destination IP address of said packet and a port of the destination of said packet;

(c) identifying one of the plurality of servers according to a calculation, wherein the calculation is performed according to the following formula:

((SRC IP ADDR + DEST IP ADDR + DEST PORT) % N)

wherein SRC IP ADDR is the source IP address of the packet; DEST IP ADDR is the destination IP address of the packet; DEST PORT is the port of the destination of the packet; % is a modulo operator; and N is the number of servers; and further comprising:

(d) distributing said packet to the identified one of said plurality of servers.

19. (original): The method of claim 1, wherein said calculation is based on data associated with the packet.

20. (original): The method of claim 19, wherein said data is invariant from packet to packet within a session.

21. (original): The method of claim 19, wherein at least a portion of the data is associated with a source of the packet.

22. (original): The method of claim 19, wherein at least a portion of the data is associated with a destination of the packet.

23. (original): The method of claim 19, wherein at least a portion of the data is associated with a destination port of the packet.

24. (original): The method of claim 19, wherein at least a portion of the data is associated with a source port of the packet.

25. (original): The method of claim 19, wherein at least a portion of the data is associated with a protocol number of the packet.

26. (canceled).

27. (currently amended): ~~The~~A method of claim 18 for load balancing a plurality of servers, comprising:

(a) receiving a packet;

(b) determining a source IP address of said packet, a destination IP address of said packet and a port of the destination of said packet;

(c) identifying one of the plurality of servers according to a calculation, wherein the formula is calculated according to the formula:

((SRC_IP_ADDR + SRC_PORT + DEST_IP_ADDR + DEST_PORT + PROTOCOL) %
N)

wherein SRC_IP_ADDR is the source IP address of the packet; SRC_PORT is the source port number of the packet; DEST_IP_ADDR is the destination IP address of the packet; DEST_PORT is the port of the destination of the packet; PROTOCOL is the protocol number; % is a modulo operator; and N is the number of servers; and further comprising:

(d) distributing said packet to the identified one of said plurality of servers.

28. (currently amended): A method for load balancing a plurality of servers, comprising:

(a) receiving a packet;

distributing the received packet to a particular one of the plurality of servers according to a calculation, wherein said calculation is based on data associated with the packet, and wherein

~~wherein~~ each of said plurality of ~~routers/proxies~~ servers performs the calculation based on data associated with the packet, wherein the calculation is performed according to the formula: ((SRC IP ADDR + DEST IP ADDR + DEST PORT) % N)

wherein SRC IP ADDR is the source IP address of the packet; DEST IP ADDR is the destination IP address of the packet; DEST PORT is the port of the destination of the packet; % is a modulo operator; and N is the number of servers.

29. (canceled).

30. (original): The method of claim 28, wherein the calculation is performed independently of any feedback from said servers.

31. (currently amended): A computer program product for enabling a computer to load balance a plurality of servers, the computer program comprising:
software instructions for enabling the computer to perform predetermined operations, and
a computer readable medium bearing the software instructions;
the predetermined operations including :

- (a) receiving a packet;
- (b) determining packet information including a source IP address of the packet, a destination IP address of the packet and a port of the destination of the packet; and
- (c) selecting a particular server from the plurality of servers for receiving a particular packet according to a calculation based on the packet information, wherein the calculation is performed according to the formula:

((SRC_IP_ADDR + DEST_IP_ADDR + DEST_PORT) % N)

wherein SRC_IP_ADDR is the source IP address of the packet; DEST_IP_ADDR is the destination IP address of the packet; DEST_PORT is the port of the destination of the packet; % is a modulo operator; and N is the number of servers.

32. (original): The computer program product of claim 31, wherein the calculation is based on data associated with the packet.

33. (canceled).

34. (currently amended): A system of distributing a packet over a network, comprising: a plurality of routers/proxies, each of said routers/proxies receiving the packet, and each of said router/proxies performing a calculation for selecting one of the routers/proxies for handling the packet, wherein the calculation is performed according to the following formula:

((SRC_IP_ADDR + DEST_IP_ADDR + DEST_PORT) % N)

wherein SRC_IP_ADDR is the source IP address of the packet; DEST_IP_ADDR is the destination IP address of the packet; DEST_PORT is the port of the destination of the packet; % is a modulo operator; and N is the number of routers/proxies.

35. (original): The system of claim 34, wherein the calculation is based on data associated with the data.

36. (original): The system of claim 35, wherein the data is invariant from packet to packet within a session.

37. (original): The system of claim 35, wherein at least a portion of the data is associated with a source of the packet.

38. (original): The system of claim 35, wherein at least a portion of the data is associated with a destination of the packet.

39. (original): The system of claim 35, wherein at least a portion of the data is associated with a source port number of the packet.

40. (original): The method of claim 35, wherein at least a portion of the data is associated with a protocol number of the packet.

41. (canceled).

42. (original): The system of claim 1, further comprising a plurality of routers/proxies, each of said routers/proxies receiving the packet, and each of said router/proxies performing a calculation for selecting one of the routers/proxies for handling the packet.

43. (currently amended): A system of claim 42, wherein each of the routers/proxies performs the calculation based on data associated with the packet.

44. (currently amended): A system of distributing a packet over a network, comprising: a plurality of servers, each of said servers receiving the packet, and each of said servers performing a calculation for selecting one of the routers/proxies for handling the packet, wherein the calculation is performed according to the following formula:

((SRC_IP_ADDR + DEST_IP_ADDR + DEST_PORT) % N)

wherein SRC_IP_ADDR is the source IP address of the packet; DEST_IP_ADDR is the destination IP address of the packet; DEST_PORT is the port of the destination of the packet; % is a modulo operator; and N is the number of servers.

45. (original): The system of claim 44, wherein the calculation is based on data associated with the packet.

46. (canceled).

47. (original): The system of claim 44, further comprising a plurality of routers/proxies, each of said routers/proxies receiving the packet, and each of said router/proxies performing a calculation for selecting one of the routers/proxies for handling the packet.

48. (currently amended): The system of claim 47, wherein the calculation by each of the router/proxies is based on data associated with the packet.